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JC564 U.S. PTO 09/611571 07/07/00

UTILITY PATENT APPLICATION TRANSMITTAL LETTER

Assistant Commissioner of Patents
Box **Patent Application**
Washington, D.C. 20231

Sir:

Enclosed herewith for filing is the following **utility patent application**:

Attorney Docket No.: **OOCL-26(2000P031945)**

Applicant: **Tetsuyuki MORIMOTO**

Title: **"POS SYSTEM"**

09611571.070700

PATENT APPLICATION FILING FEE CALCULATION

	No. Filed	Less	Rate/Claim	Fee
Total Claims	15	-20	0 x $18.00	$ 00.00
Independent Claims	6	-3	3 x $78.00	$ 234.00
Minimum Filing Fee				$ 690.00
Multiple Dependency Fee (if applicable - $260.00)				$ 00.00
50% Reduction for Small Entity (Independent Inventor, Non-profit Corporation, or Small Business Concern) - appropriate verified statement attached				$- 00.00
TOTAL FILING FEE				$ 924.00
ASSIGNMENT RECORDATION				$ 40.00
TOTAL FEES ENCLOSED				**$ 964.00**

☒ Specification: 17 Total Pages (including claims and abstract)

☒ Drawing(s): 2 Total Sheets (FIGs. 1-2)

Also enclosed herewith for filing in connection with the enclosed application are:

☒ Our check in the amount of **$ 964.00** (the total filing fee) is enclosed herewith. If this check is unacceptable, insufficient or omitted, kindly charge the entire or additional filing fee, as appropriate, to the deposit account of **Straub & Pokotylo,** deposit account number **50-1049**. To facilitate that charge, a duplicate copy of this letter is enclosed herewith.

☒ Postcard Receipt;

☒ Preliminary Amendment;

☒ Oath or Declaration:
  ☒ Newly executed on April 11, 2000;
  ☐ Copy from a prior application (36 C.F.R. § 1.63(d);

☒ Assignment Papers to: NITSUKO Corporation;

☐ Information Disclosure Statement, modified PTO-1449, and (0) cited reference(s);

☐ Letter referencing previously filed disclosure document; number __________ filed ________________;

☐ Verified Statement Claiming Small Entity Status:
  ☐ Newly executed on _______________;
  ☐ Copy from a prior application , status still proper and desired;

☐ Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b);

☐ Microfiche Computer Program (Appendix);

☐ English translation document;

☒ Submission of a Priority Document, a certified copy of a **Japanese** patent application or inventor's certificate, filed **February 9, 2000** and assigned serial no. **2000-031945**, upon which a claim to priority is made; and

☐ Other: ____
____.

Respectfully submitted,

STRAUB & POKOTYLO

John C. Pokotylo
John C. Pokotylo, Attorney
Reg. No. 36,242
Customer No. IDON601137

*****EXPRESS MAIL CERTIFICATION*****

"Express Mail" mailing label number: **EL547453325US**
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John C. Pokotylo
Signature of person making certification

John C. Pokotylo
Name of person making certification

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Attorney Docket No.: **OOCL-26(2000P031945)**

Applicant: **Tetsuyuki MORIMOTO**

Serial No.: **Not yet assigned**

Filing Date: **Herewith**

Title: **POS SYSTEM**

Examiner: **Not yet assigned**

Group Art Unit: **Not yet assigned**

ASSISTANT COMMISSIONER FOR PATENTS
Box Patent Application
Washington, D. C. 20231

S I R:

PRELIMINARY AMENDMENT

Before examining the above referenced application, please amend the specification as follows:

IN THE SPECIFICATION:

Page 1	line 3,	change "POS" to --point of sale ("POS")--;
	line 13,	change "sumps" to --sums--;
	line 21,	delete "version"; after "updated", insert --to a new version--;
	line 22,	delete "version"; after

		“updated”, insert --to the new version--;
Page 2	line 6,	change “provide” to --address quickly--;
	line 7,	delete “fast coping with”;
	line 12,	change “cappable” to --capable--;
	line 16,	change “in” to --at--; change “reduction of” to --reducing--;
	line 20,	change “of reduction of the” to --able to reduce--; change “cost” to --costs--; change “improvement of the” to --improve--;
	line 25,	after “data”, insert --,--;
Page 3	line 2,	change “from the” to --for saving--; delete “saving standpoint”;
Page 4	line 12,	change “LAN” to --local area network (“LAN”)--; change “WAN” to --wide area network (“WAN”); change “Data having” to --Once data has--;
	line 13,	after “side”, insert --, it--;
Page 6	line 17,	change “includes” to --include--;

	line 24,	change “display” to --displaying--;
	line 27,	after “line”, insert --,--;
	line 28,	change “minimum” to --minimal--;
Page 7	line 25,	change “means” to --potential sources--;
	line 29,	change “renewal is” to --updates are--;
Page 8	line 1,	change “renewal” to --updates--;
	line 6,	change “coped with” to --addressed by--;
	line 7,	delete “as well as permitting”; after “management”, insert --is permitted--;
	line 8,	change “providing the” to --system--; change “of the system” to --is provided--;
	line 17,	change “time, in” to --times during--;
	line 24,	after “construction”, insert --of the terminal units--;
Page 9	line 23,	change “110” to --100--;
Page 10	line 1,	after “from”, insert --an--;
Page 11	line 13,	change “coped with in” to

--addressed by--;
line 24, change "from the" to
--to save--; and
line 25, delete "serving standpoint".

IN THE CLAIMS:

Please amend claim 7 as follows:

Claim 7

7. (Amended) The POS system according to claim 1, wherein each communication between the POS terminal unit and the host unit is executed via a network selected from a group consisting of a LAN [or] and a WAN.

Please add the following new claims:

13. A system for effecting point of sale functions, the system comprising:

a) a host, the host including means for storing all programs related to execution of the point of sale system;

b) at least two point of sale terminals, each of the at least two point of sale terminals having

i) means for generating transmission data, and

ii) means for exchanging data with the host; and

c) communication means coupled with the host and each of the at least two point of sale terminals, and facilitating communications between the host and each of the at least two point of sale terminals.

14. In a system including a host, at least two point of sale terminals, and communications means coupled with the host and each of the at least two point of sale terminals, and facilitating communications between the host and each of the at least two point of sale terminals, a method for effecting point of sale functions, the method comprising:

a) storing, solely at the host, all programs related to execution of the point of sale system;

b) generating, by each of the point of sale terminals, data related to sales; and

c) forwarding the data related to sales from each of the point of sale terminals to the host as soon as the data is generated.

15. The method of claim 14 further comprising:

d) purging, as soon as the data related to sales has been forwarded to the host, the data related to sales from the point of sale terminal forwarding the data.

REMARKS

The specification has been amended to correct minor inadvertent and grammatical errors.

Claim 7 has been amended to remove alternative recitations. Claims 13-15 have been added.

Respectfully submitted,

July 7, 2000

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John C. Pokoty
Signature of person making certification

John C. Pokotylo
Name of person making certification

03/945/2000

POS SYSTEM

BACKGROUND OF THE INVENTION

The present invention relates to POS systems and, more particularly, to a POS system with a number of terminal units.

In a prior art POS system, a plurality of POS terminal units are connected via a telephone line to a host unit, and the data inputted from the terminal units are sent out to the host unit. For example, in a convenience store, sales data such as sales items, quantities and dates, which are inputted from a terminal unit installed in each shop, are sent out to the host unit. The host unit receives and sumps up these sales data, and executes the most efficient stock management. The terminal units are provided with execution programs peculiar to the system, and in actual service these programs are started to execute pertinent processes.

In the prior art POS system, in which execution programs are stored in individual terminal units, whenever the execution programs peculiar to the system are version updated, the execution programs stored in all the terminal units have to be version updated. In addition, the management of the terminal units and the system should be performed for each terminal unit installed in each shop. This inevitably leads to scale increase of the system construction, resulting in reducing system operability.

In addition, the data to be sent out from all the

terminal units are enoumous in quantity. Accordingly, sales data and other data are not frequently sent out as real-time data from each terminal unit to the host unit. Instead, a so-called batch process is executed, in which the data is collectively sent out at night or the like. This means that it is impossible to provide fast coping with a trouble or the like in the circumstances of real-time processing during the duty service time of the terminal unit.

SUMMARY OF THE INVENTION

An object of the present invention is to provide a POS system cappable of great reduction of the terminal management cost and terminal installation cost.

Another object of the present invention is to provide a POS system capable of coping with any trouble in the head quarter, and reduction of the speed and expenditures of coping with the trouble.

A further object of the present invention is to provide a POS system simplified in construction, capable of reduction of the machine cost and improvement of the reliability.

A still further object of the present invention is to provide a POS system, which, with data present in a head quarter server, does not only permit readily backing up data but also permits real-time data processing.

A yet further object of the present invention is to provide a POS system, in which the terminal can be started in a minimum time, so that at the time of non-use

of the terminal the power supply can be turned off, which is desired from the energy saving standpoint.

A yet another object of the present invention is to provide a POS system, which does not require development of any software for data transfer with the head quarter and software for master-related data production, thus permitting reduction of software-related cost.

A further object of the present invention is to provide a POS system, which does not require any master updating time, thus eliminating time, in which the POS can not be used.

According to an aspect of the present invention, there is provided a POS system comprising a host unit and a plurality of POS terminal units connected thereto via a predetermined communication line for data transfer/receipt between each POS terminal unit and the host unit, wherein: execution programs of the POS system are stored in the host unit; and each POS terminal unit is not provided with any POS system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit.

The plurality of terminal units further have a display function of displaying transmitted data and display image sent out from the host unit, and a printing function of printing predetermined data. The transfer/receipt data is subjected to data quantity

reduction and compression. The data reduction and compression are performed in units of image data frames by comparing the present frame and immediately preceding frame of transferred data, only data recognized to have been changed with respect to the immediately preceding frame being compressed. The data quantity reduction and compression are executed by a process of transferring only position data and character data in character data frames. The POS system is managed by a managing system provided only on the host unit side. Each communication between the POS terminal unit and the host unit is executed via a LAN or a WAN. Data having been sent out from a POS terminal unit to the host unit side is not held in the POS terminal side.

According to another aspect of the present invention, there is provided a POS system comprising a host unit and a plurality of POS terminal units connected thereto via a predetermined communication line for data transfer/receipt between each POS terminal unit and the host unit, wherein: execution programs of the POS system are stored in the host unit; each POS terminal unit is not provided with any POS system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit; and a purchase amount settling function in each POS terminal unit is executed via the host unit.

According to other aspect of the present invention, there is provided a POS system comprising a host unit

and a plurality of different POS units connected via predetermined communication line thereto and operable in POS systems for different kinds of services, wherein: POS system execution programs for the different kinds of services are collectively stored in the host unit; and each POS unit is not provided with any corresponding system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit.

A maintenance system for the maintenance of the plurality of the POS systems for the different kinds of services is provided only in the host unit.

According to further aspect of the present invention, there is provided a POS system comprising a host unit and a plurality of different POS units connected via predetermined communication line thereto and operable in POS systems for different kinds of services, wherein: POS system execution programs for the different kinds of services are collectively stored in the host unit; each POS unit is not provided with any corresponding system execution program, and has at least a transmission data generating function and a communication function for data transfer/receipt with the host unit; and a purchase amount settling function in each POS terminal unit is executed via the host unit.

Other objects and features will be clarified from the following description with reference to attached drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a view showing the construction of an embodiment of the POS system according to the present invention; and

Fig. 2 is a view showing a network organized as an example of application of the present invention.

PREFERRED EMBODIMENTS OF THE INVENTION

Preferred embodiments of the present invention will now be described with reference to the drawings. Fig. 1 is a view showing the construction of an embodiment of the POS system according to the present invention.

In this embodiment, a plurality of terminal units 11 to 1N are connected via a communication line 2, such as a telephone line, a radio line, an optical line, etc. to a host unit 3, and the data can be exchanged between each terminal unit and the host unit. The individual terminal units 11 to 1N includes CPUs 11A to 1NA, displays 11B to 1NB, input means 11C to 1NC and printers 11D to 1ND.

In this embodiment, unlike the prior art, the execution programs 3A are not provided in the terminal units 11 to 1N, but they are provided with only a communicating function and a function of receiving the data, display image data and printing data transmitted from the terminal units. Instead, execution programs and maintenance and control programs are stored in the sole host unit 3. Thus, on the communication line only minimum necessary data such as display image data and

printing data are received, and other data for controlling these terminal units and host unit are unnecessary. Thus, far less data quantity is necessary.

While only the display image data and printing data to be transmitted appear on the communication line 2 as noted above, more efficient data transfer is obtainable by using a method of reducing and/or compressing the quantity of transmitted data. Accordingly, in this embodiment the transferred image data is dealt with in units of frames for comparing the present and immediately preceding transferred data frames, and only the data with recognized changes are transmitted by compressing them. Regarding the character data among the transmitted data in the POS system, color and gradation data are transmitted not as the image data but as coded data. By coding the data, only a minimum transmission data quantity is necessary.

In this embodiment, the terminal unit side is provided with only the terminal function in the intrinsic sense, i.e., input/output means such as a keyboard, a touch panel and as voice input means, display means for displaying image and printing means for printing the image. The terminal unit construction is thus simplified, and it is possible to reduce the machine cost and improve the reliability. Other means of high cost, i.e., system program executing means and control software, are provided on only the host unit side. Thus, POS system execution program version renewal is

necessary only on the host unit side, and version renewal of each POS terminal unit installed in each shop as in the prior art is unnecessary. The system management thus can be greatly simplified, and it is possible to obtain pronounced corresponding cost reduction. Thus, any trouble can be coped with the head quarter on the host unit side, as well as permitting ready line management and providing the reliability of the system.

Furthermore, no operation of installing execution program in each POS terminal unit is necessary.

The operating system in the host unit is a simplified operating system (OS), and the communication between each terminal unit and the host unit is executed via LAN or WAN.

In this embodiment, the data is in a host unit side server. Thus, it is possible to readily back up the data, eliminate time, in which the POS terminal unit cannot be used, and obtain real-time data processing.

Still further, each terminal unit is provided with only functions of inputting data, displaying data on screen and printing data, and after transmission of data from a terminal unit to the host unit side, the data need not be held in the terminal unit. Thus, no memory to such end is necessary, and the construction can be simplified and realized at low cost.

Yet further, the terminal unit is not provided with any system execution program but is provided with only a communication means, a display, a printer, etc., so

that operation start time is very short and it can be started in a minimum time. When the terminal unit is not used, the power supply may be disconnected, which is desired from the energy saving standpoint.

Moreover, it is unnecessary to develop software for data transfer between the host unit and each POS terminal unit or produce master-related updating data. Thus, it is possible to greatly reduce software development exepeditures.

Fig. 2 is a view showing a network organized as an example of application of the present invention. The network is centered on a host unit 100, and shop-side POS terminal unit 110, option terminal unit 120, bank-related system 130, credit-related system 140 and maintenance center 150 are connected to the host unit 100 via various high-rate data transfer lines (such as INS, OCN service and CAFIS). The shop side POS terminal unit 100 may be constituted by a variety of shops, such as a convenience store, a fast food store and a credit card subscriber shop. The option terminal unit 120 may be provided with such peripheral units as color printer, and it can receive the data transmitted from the POS terminal unit 110 via the host unit 110 for data analysis, customer management processing, etc. The unit 120 is provided on the main shop side which controls the POS system. Of course the unit 120 may be provided, if desired, on the shop side with a POS terminal unit provided therein. The bank-related system 130 includes

a memory for storing data from ATM or like terminal. The credit-related system 140 has a memory for storing credit-processed data. The maintenance center 140 is usually provided on the side of the host unit 100 for the system maintenance. In this embodiment, however, the center 140 is provided as an independent unit connected to the host unit 100 via the communication line. This is effective when it is desired to provide the center 140 separately due to such problem as installation space on the side of the host unit 100.

The bank- and credit-related systems 130 and 140 may have a function of executing a settling process according to sales data transmitted from the POS terminal unit 110 via the host unit 100.

This embodiment is not of a type concerning a single kind of service, such as one that data is transmitted from a terminal unit installed in a convenience chain store to the host unit side. Instead, in this embodiment a plurality of different kinds of services are connected to the host unit 100, which executes processes concerning these different kinds of services. In this case, the maintenance center system 150 provided separately of the host unit executes the system maintenance. This has an effect of suppressing the enlargement of the scale of the host unit 100. In addition, with the exclusive system provided for the system maintenance, it is possible to provide highly reliable management.

In this system, programs for executing POS system

processes of the plurality of different kinds of services are stored in the host unit 100, and business processes are executed according to these programs.

As has been described in the foregoing, the POS system according to the present invention permits simplification of the system construction, improvement of the system management and real-time processes without particular line. Specifically, according to the present invention the following effects are obtainable.

(1) Since no application program is provided in any terminal, it is possible to greatly reduce the terminal management cost and terminal installation cost.

(2) Any trouble can be coped with in the head quarter, and it is possible to reduce the speed and expenditures of coping with the trouble.

(3) Since the terminal construction is simplified, it is possible to reduce the machine cost and improve the reliability.

(4) Since data is on the head quarter server, not only data can be readily backed up, but also the data processing can be executed as real-time processing.

(5) The terminal can be started in a minimum time. Thus, at the time of non-use of the terminal, the power supply can be turned off, which is desired from the energy serving standpoint.

(6) It is unnecessary to develop any software for data transfer with respect to the head quarter server and software for master-related updating data production,

and it is thus possible to reduce software-related cost.

(7) The terminal does not require any master updating time, and it is thus possible to eliminate time, in which the POS can not be used.

Other effects of the present invention than the above effects are adequately described in the above description, and are also obvious form the description of the embodiments.

Changes in construction will occur to those skilled in the art and various apparently different modifications and embodiments may be made without departing from the scope of the present invention. The matter set forth in the foregoing description and accompanying drawings is offered by way of illustration only. It is therefore intended that the foregoing description be regarded as illustrative rather than limiting.

What is claimed is:

1. A POS system comprising a host unit and a plurality of POS terminal units connected thereto via a predetermined communication line for data transfer/receipt between each POS terminal unit and the host unit, wherein:

execution programs of the POS system are stored in the host unit; and

each POS terminal unit is not provided with any POS system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit.

2. The POS system according to claim 1, wherein the plurality of terminal units further have a display function of displaying transmitted data and display image sent out from the host unit, and a printing function of printing predetermined data.

3. The POS system according to claim 1, wherein the transfer/receipt data is subjected to data quantity reduction and compression.

4. The POS system according to claim 3, wherein the data reduction and compression are performed in units of image data frames by comparing the present frame and immediately preceding frame of transferred data, only data recognized to have been changed with respect to the

immediately preceding frame being compressed.

5. The POS system according to claim 3, wherein the data quantity reduction and compression are executed by a process of transferring only position data and character data in character data frames.

6. The POS system according to claim 1, wherein the POS system is managed by a managing system provided only on the host unit side.

7. The POS system according to claim 1, wherein each communication between the POS terminal unit and the host unit is executed via a LAN or a WAN.

8. The POS system according to claim 1, wherein data having been sent out from a POS terminal unit to the host unit side is not held in the POS terminal side.

9. A POS system comprising a host unit and a plurality of POS terminal units connected thereto via a predetermined communication line for data transfer/receipt between each POS terminal unit and the host unit, wherein:

execution programs of the POS system are stored in the host unit;

each POS terminal unit is not provided with any POS system execution program, and has at least a transmission

data generating function and a communication function for data exchange with the host unit; and

a purchase amount settling function in each POS terminal unit is executed via the host unit.

10. A POS system comprising a host unit and a plurality of different POS units connected via predetermined communication line thereto and operable in POS systems for different kinds of services, wherein:

POS system execution programs for the different kinds of services are collectively stored in the host unit; and

each POS unit is not provided with any corresponding system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit.

11. The POS system according to claim 10, wherein a maintenance system for the maintenance of the plurality of the POS systems for the different kinds of services is provided only in the host unit.

12. A POS system comprising a host unit and a plurality of different POS units connected via predetermined communication line thereto and operable in POS systems for different kinds of services, wherein:

POS system execution programs for the different kinds of services are collectively stored in the host unit;

each POS unit is not provided with any corresponding system execution program, and has at least a transmission data generating function and a communication function for data transfer/receipt with the host unit; and

a purchase amount settling function in each POS terminal unit is executed via the host unit.

ABSTRACT OF THE DISCLOSURE

A POS system comprising a host unit and a plurality of POS terminal units connected thereto via a predetermined communication line for data transfer/receipt between each POS terminal unit and the host unit is disclosed. Execution programs of the POS system are stored in the host unit, and each POS terminal unit is not provided with any POS system execution program, and has at least a transmission data generating function and a communication function for data exchange with the host unit.

FIG.1

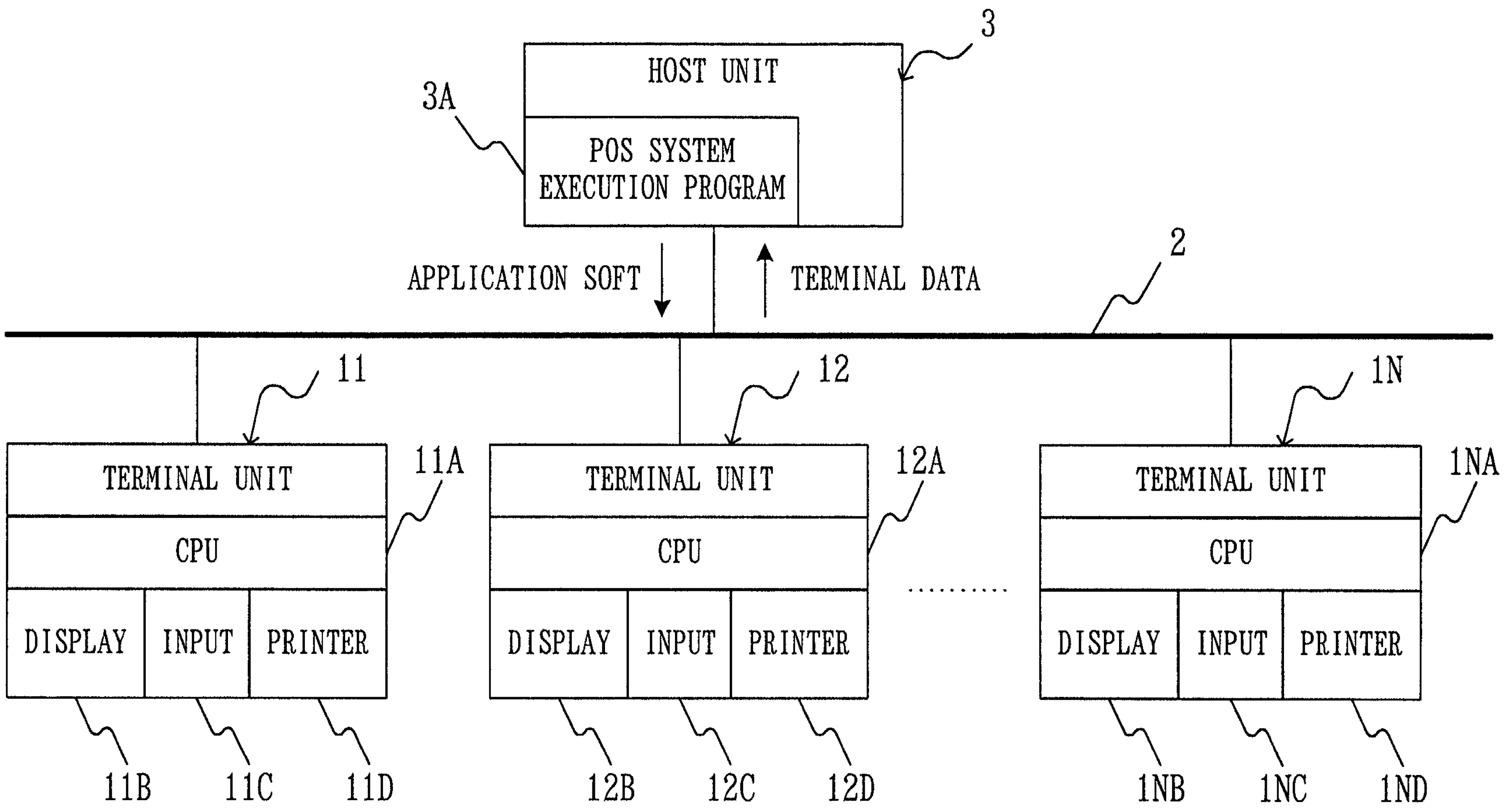
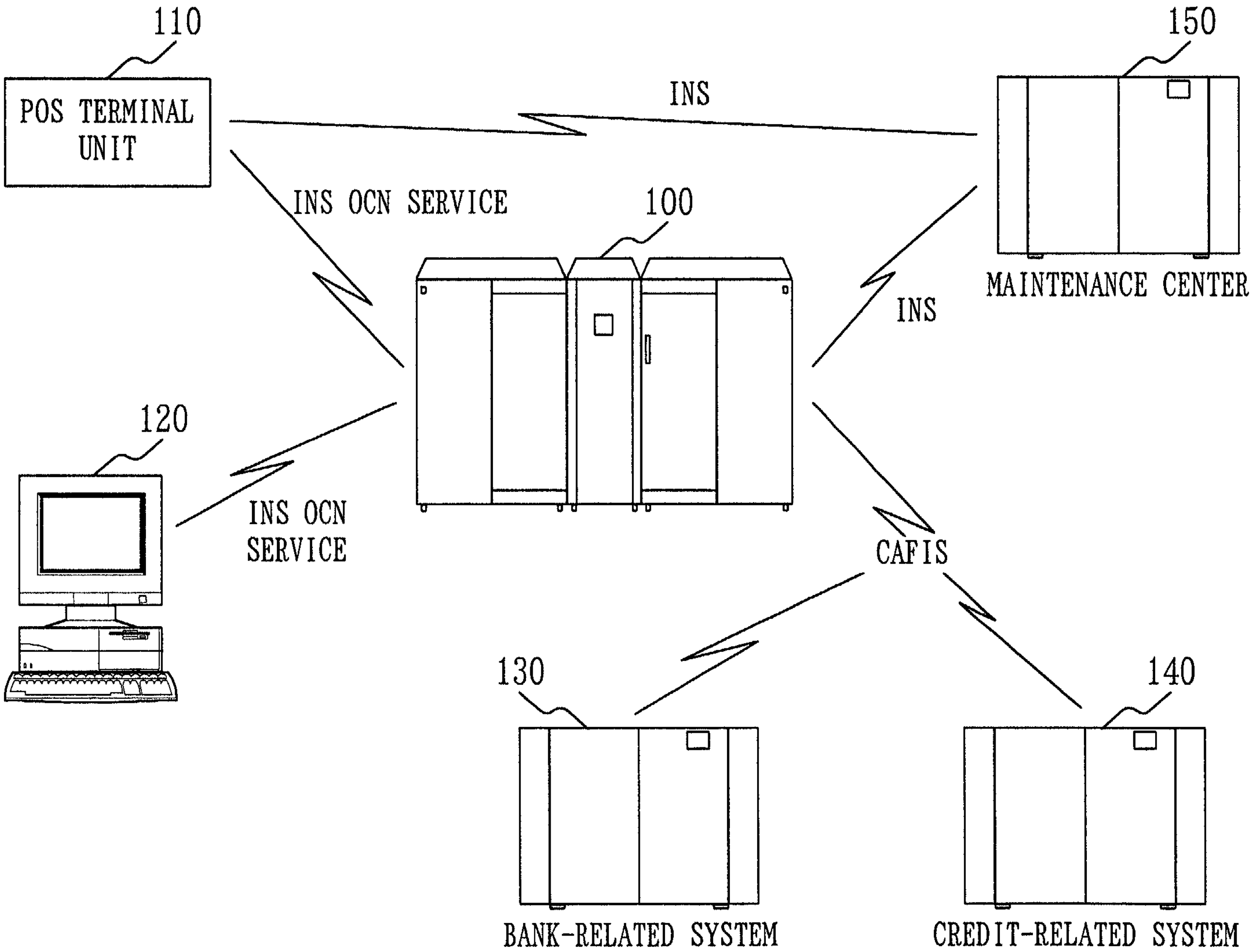

3
HOST UNIT
3A
POS SYSTEM EXECUTION PROGRAM
APPLICATION SOFT
TERMINAL DATA
2
11
12
1N
TERMINAL UNIT
11A
CPU
DISPLAY
INPUT
PRINTER
TERMINAL UNIT
12A
CPU
DISPLAY
INPUT
PRINTER
TERMINAL UNIT
1NA
CPU
DISPLAY
INPUT
PRINTER
11B
11C
11D
12B
12C
12D
1NB
1NC
1ND

FIG.2


110
POS TERMINAL UNIT
INS
150
INS OCN SERVICE
100
INS
MAINTENANCE CENTER
120
INS OCN SERVICE
CAFIS
130
140
BANK-RELATED SYSTEM
CREDIT-RELATED SYSTEM

PTO/SB/106 (8-96)
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Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。	As a below named inventor, I hereby declare that:
私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。	My residence, post office address and citizenship are as stated next to my name.
下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。	I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
____________________	POS SYSTEM
____________________	____________________
上記発明の明細書（下記の欄でx印がついていない場合は、本書に添付）は、	the specification of which is attached hereto unless the following box is checked:
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Japanese Language Declaration
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私は、米国法典第３５編１１９条(a)-(d)項又は３６５条(b)項に基き下記の、米国以外の国の少なくとも一ヵ国を指定している特許協力条約３６５(a)項に基ずく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)
外国での先行出願

(Number) (番号)	(Country) (国名)	(Day/Month/Year Filed) (出願年月日)	Priority Not Claimed 優先権主張なし
031945/2000	Japan	09/02/2000	□
			□

私は、第３５編米国法典１１９条(e)項に基いて下記の米国特許出願規定に記載された権利をここに主張いたします。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)
(出願番号)
(Filing Date)
(出願日)

(Application No.)
(出願番号)
(Filing Date)
(出願日)

私は、下記の米国法典第３５編１２０条に基いて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約３６５条(c)に基ずく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第３５編１１２条第１項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願書提出日以降で本出願書の日本国内または特許協力条約国際提出日までの期間中に入手された、連邦規則法典第３７編１条５６項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

(Application No) (出願番号)	(Filing Date) (出願日)	(Status: Patented, Pending, Abandoned) (現況：特許許可済、係属中、放棄済)

私は、私自身の知識に基ずいて本宣言書中で私が行なう表明が真実であり、かつ私の入手した情報と私の信じるところに基ずく表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第１８編第１００１条に基ずき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

031975/2000

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Japanese Language Declaration
(日本語宣言書)

委任状：　私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。（弁護士、または代理人の氏名及び登録番号を明記のこと）

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith *(list name and registration number)*

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（第三以降の共同発明者についても同様に記載し、署名をすること）

(Supply similar information and signature for third and subsequent joint inventors.)